

Examiner asserts that the quinonediazide methyl gallate compound (b2), which is present in all the examples, is required in the claimed compounds in order to provide the improved resist pattern having a good shape.

Claims 17-20 were also rejected under 35 U.S.C. 112, second paragraph, as allegedly being incomplete for omitting essential elements, such as the quinonediazide methyl gallate compound which is present in all the examples.

The Examiner again asserts that the quinonediazide methyl gallate compound is required to provide the improved resist pattern having a good shape. See Table 2 on page 30.

In the Amendment under 37 C.F.R. § 1.114(c), Applicants submitted that features that are merely preferred are not to be considered critical. Applicants further maintained that an enablement rejection based on the grounds that a disclosed critical limitation is missing from a claim should be made only when the language of the specification makes it clear that the limitation is critical for the invention to function as intended. Applicants also noted that broad language in a disclosure, including the abstract, omitting an allegedly critical feature, tends to rebut an argument of criticality.

In addition, Applicants submitted that quinonediazide methyl gallate is merely a preferred embodiment of the presently claimed component (B). Applicants further submitted that even if it were necessary for the claims to recite a mere preferred embodiment, quinonediazide methyl gallate is not an indispensable feature of the present invention. Applicants additionally submitted that the broad language in the disclosure, *e.g.*, page 4, line 10, to page 5, line 6, rebuts the Examiner's assertion that the quinonediazide methyl gallate is a critical element.

**Applicants' Response**

In responding to the rejections in the most recent Office Action, Applicants respectfully reassert the arguments set forth in the Amendment under 35 U.S.C. § 1.114(c).

Applicants also assert that it appears that the Examiner has misinterpreted the requirements of 35 U.S.C. § 112, first and second paragraphs, as discussed in §§ 2164.08(c) and 2172.01 of the MPEP. Although § 2164.08(c) sets forth that a feature that is taught as critical in the specification and is not recited in the claims should result in the rejection of such claim under the enablement provision section of 35 U.S.C. § 112, this section of the MPEP additionally sets forth, however, *that features that are merely preferred are not to be considered critical* (emphasis ours).

Thus, Applicants submit that an enablement rejection based on the grounds that a disclosed critical limitation is missing from a claim should be made only when the language of the specification makes it clear that the limitation is critical for the invention to function as intended. As noted in Applicants' Amendment under 37 C.F.R. § 1.114(c), the broad language in the disclosure, including the abstract, omitting the allegedly critical feature, tends to rebut the Examiner's argument of criticality. In other words, quinonediazide methyl gallate is merely a preferred embodiment of the presently claimed component (B).

Applicants again point out that on page 16 of the specification it is indicated that "photosensitizer (B) in the composition of the present invention comprises an ester between any of the hydroxyl compounds ... and a quinodiazide compound." In addition, the hydroxyl compounds listed on page 14-16 include, *inter alia*, gallic acid and partially esterified gallate.

Furthermore, in the Japanese application that corresponds to the present application (JP 10-156213), it is disclosed that gallic acid esters are preferable embodiments of the photosensitizer (B), but that they are not essential. *See* paragraphs [0030] to [0035]. Additionally, Comparative Examples 1 to 4 of the Japanese Application comprise gallic acid esters as the photosensitizer (B) and exhibit poor dimensional change rates. Thus, it is clear that components other than component (B) are required to give excellent dimensional change rates, and Applicants have recited those components and have not omitted any critical features.

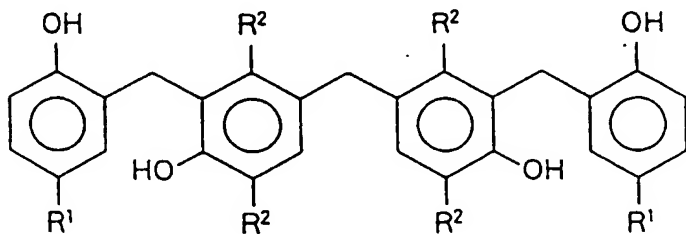
Accordingly, Applicants respectfully submit that the § 112 rejections be reconsidered and withdrawn.

**Response to the Rejection under 35 U.S.C. § 103(a)**

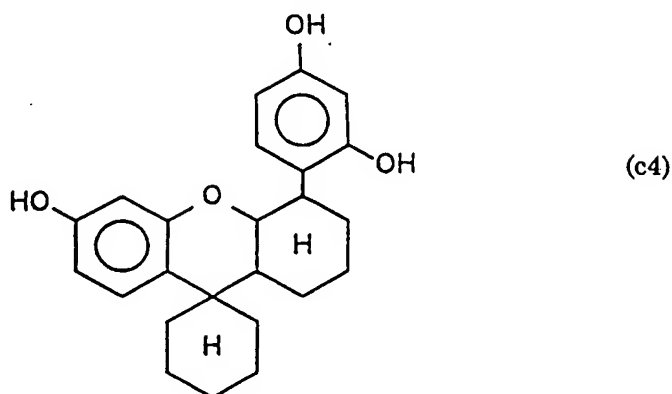
Claims 17-20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kawata et al., in view of Momota et al., further in view of Uetani et al. '657.

Applicants submit, however, that the teachings of Kawata, Momota and Uetani '657 do not render the presently claimed invention obvious.

The present invention is directed to a positive photoresist composition comprising (A) an alkali soluble resin, (B) a photosensitizer containing quinonediazide ester of formula (I):



and (C) at least one compound of phenol group-containing compounds having structural formula (c4).



The above compound has an elution time in the range from 6 to 30 minutes in a particularly specified high performance liquid chromatography method.

Applicants submit that Kawata differs from the presently claimed composition in that the groups defined as  $R_2$  are different, and the phenol-containing compound taught therein has a structural formula different than that defined as (c4). Further, Momota also does not teach or suggest (c4).

With respect to Uetani '657, Applicants submit that Uetani '657 does not teach or suggest the presently claimed compound (I).

Thus, it is respectfully asserted that one of ordinary skill in the art would not have been motivated to combine the teachings of Kawata, Momota and Uetani '657 in the manner necessary to arrive at the present invention.

Applicants respectfully submit that in rejecting the claims under § 103, the Examiner is applying an improper "obvious to try" rationale. *See* MPEP § 2145. Applicants assert that the

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cited prior art does not provide an indication of which of the many possible choices would have been successful. Specifically, one of ordinary skill in the art would not have been motivated to incorporate the phenol containing compounds of Uetani '657 into the composition of Kawata.


Additionally, Applicants submit that the cited prior art does not suggest a composition that minimizes dimensional changes to the surface of a substrate.

Thus, Applicants respectfully request that the § 103 rejection be reconsidered and withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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